REMARKS/ARGUMENTS

Pending claims 1-4, 7-13, and 16-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,892,962 (Cloutier) in view of U.S. Patent No. 5,603,043 (Taylor) in further view of U.S. Patent No. 5,388,206 (Poulton) and U.S. Patent No. 3,662,349 (Bartlett). Particularly, the Office Action asserts that all limitations of claims 1 and 10 (and independent claim 18) are taught by Cloutier, except for the subject matter in these claims relating to a plurality of removable complex arithmetic elements (CAEs), which the Office Action contends is taught by Taylor, and except for the subject matter relating to the plurality of CAEs including a sequencer and an arithmetic unit, which is allegedly taught by Poulton. Therefore, the Office Action concludes, it would have been obvious to one of ordinary skill in the art to combine Cloutier, Taylor and Poulton (and Bartlett) to arrive at what is claimed in claims 1, 10 and 18.

Claims 1, 10 and 18 have been amended to recited that each of the multiple complex arithmetic elements (CAEs) can access a local memory and further that each such CAE includes a CAE memory and a sequencer to cause only an associated arithmetic unit to execute an operation on data. Poulton nowhere teaches or suggests such a sequencer. Instead, while Poulton teaches the presence of two sequencers, each one is associated with multiple processors to generate instructions for multiple processors. This is in sharp contrast to the single sequencer that only causes execution of an operation on a single corresponding arithmetic unit.

Nor does the primary reference Cloutier teach or suggest multiple CAEs which can each access a local memory. In this regard, the Office Action contends that the local memory of Cloutier is memory 120 and that the plural CAEs are the various FPGAs 104. However, Cloutier instead teaches that memories 120 can only be accessed by its associated FPGA. Cloutier, 2:53-55; FIG. 2.

The rejection of claim 1 is further improper as there is no basis for combining, at least, Bartlett with the remaining references. In this regard, Bartlett is directed to a program system for a telephone exchange. Bartlett adds no teaching with regard to the claimed subject matter; nor are the sequencers in Bartlett each associated with a separate arithmetic unit to cause data to be sequenced from an associated memory to only the arithmetic unit and to cause only the arithmetic unit to execute an operation on the data sequenced. For this further reason, claim 1 and the claims depending therefrom are patentable over the cited art. For at least the same

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reasons independent claims 10 and 18 and the claims depending therefrom are similarly patentable.

Claim 18 is further patentable as the cited art nowhere teaches that a re-targetable communication system as recited be formed on a single integrated circuit, or where the scaleable functional units include a media access control processor.
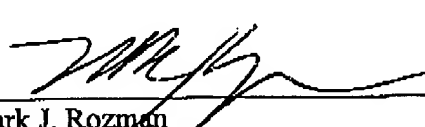
While not described further herein, dependent claims standing rejected over combinations including five and more references cannot stand for the further reason that there is absolutely no basis or motivation for combining these numerous references from disparate fields to obtain the subject matter of these dependent claims.

New dependent claim 27 is patentable at least for the same reasons as the independent claim from which it depends.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 20-1504.

Respectfully submitted,

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